



**City of Kingston
Report to Council
Report Number 19-307**

To: Mayor and Members of Council
From: Sheila Kidd, Commissioner, Transportation & Public Works
Resource Staff: Jeremy DaCosta, Director, Transit Services
Brent Fowler, Director, Corporate Asset Management & Fleet
Date of Meeting: November 19, 2019
Subject: Award of Two Electric Buses and Charging Equipment

Executive Summary:

On May 8, 2019, Council received Report Number 19-140 and approved a budget amendment of \$2,713,876 funded by a \$556,875 grant from the Federation of Canadian Municipalities (FCM), an allocation of \$1,089,712 from the Investing in Canada Infrastructure Program (ICIP), and \$1,067,289 from the Transit Capital Reserve Fund, for the purchase of two 12-metre/40-foot battery electric buses and required charging equipment and services.

Staff issued a Request for Proposals (RFP F31-TPW-TFS-2019-19) for the purchase of up to two 40-foot electric buses and the associated charging equipment. Council approval is required because only one bid submission was received to the RFP and, as a result, staff does not have delegated authority to proceed with the purchase.

The funding agreement with FCM has been executed for the purchase of one electric bus. The ICIP funding allocation for the purchase of an additional bus and charging equipment has not yet been approved.

Staff is seeking approval to enter into a vehicle purchase agreement with New Flyer Industries Canada ULC, commonly referred to as New Flyer Industries, to purchase two 2020 model year 12-metre/40-foot battery electric transit buses, associated charging equipment, and supporting services. The first electric bus will be purchased immediately using the confirmed funding from FCM. The second electric bus and charging equipment will be purchased only after receiving ICIP funding approval and execution of the required transfer payment agreement.

November 19, 2019

Page 2 of 6

Recommendation:

That the Mayor and Clerk be authorized to enter into a contract with New Flyer Industries Canada ULC, in a form satisfactory to the Director of Legal Services and within the approved capital budget, for the purchase of one (1), 2020 model year, 12 metre/40 foot electric bus; and

That the Mayor and Clerk be authorized to enter into a contract with New Flyer Industries Canada ULC, in a form satisfactory to the Director of Legal Services and within the approved capital budget, for one (1) additional 2020 model year, 12 metre/40 foot electric bus and associated charging equipment, subject to the execution of a transfer payment agreement for Investing in Canada Infrastructure Program (ICIP).

November 19, 2019

Page 3 of 6

Authorizing Signatures:

ORIGINAL SIGNED BY COMMISSIONER

Name, Commissioner, Title

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER

**Lanie Hurdle, Interim Chief
Administrative Officer**

Consultation with the following Members of the Corporate Management Team:

Peter Huigenbos, Acting Commissioner, Community Services	Not required
Brad Joyce, Acting Commissioner, Corporate Services	
Jim Keech, President & CEO, Utilities Kingston	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	

November 19, 2019

Page 4 of 6

Options/Discussion:

On May 8, 2019, Council received Report Number 19-140 and approved a budget amendment of \$2,713,876 funded by a \$556,875 grant from the Federation of Canadian Municipalities (FCM), an allocation of \$1,089,712 from the Investing in Canada Infrastructure Program (ICIP), and \$1,067,289 from the Transit Capital Reserve Fund, for the purchase of two 12-metre/40-foot battery electric buses and required charging equipment and services.

Staff issued a Request for Proposal (RFP) for the purchase of two 12-metre/40-foot electric buses and the associated charging equipment. Only one proposal from New Flyer Industries Canada ULC was received for this RFP and it is compliant with the specifications that were requested. New Flyer Industries has been a previous supplier of diesel buses to the City of Kingston.

The grant funding from the FCM is for the purchase of one electric bus. The funding allocation through ICIP is for the purchase of one electric bus and the charging equipment. The funding agreement with FCM has been executed between FCM and the City. The approval process for ICIP funding was suspended due to the Federal election. Although there has been no formal communication to the City regarding the ICIP approval, it is anticipated that ICIP approval will occur in the near future.

Staff is seeking approval to enter into a vehicle purchase agreement with New Flyer Industries Canada ULC to purchase two 2020 model year 12-metre/40-foot battery electric transit buses, associated charging equipment and supporting services. The first electric bus will be purchased immediately using the confirmed funding from FCM. The second electric bus and charging equipment will be purchased after receiving ICIP funding approval and the execution of the required transfer payment agreement.

Each bus will be delivered to the City by the vendor approximately 365 days (1 year) after receiving a signed vehicle purchase agreement. The charging equipment will be delivered 26 weeks after it is ordered from the vendor. Given the shorter delivery time for the charging equipment of 26 weeks compared to 365 days for the bus, a delay in receiving ICIP funding for the charging equipment should not have an impact on having it delivered and installed prior to the first bus being delivered, as long as ICIP funding is received by May 1, 2020. If ICIP funding is delayed beyond this date, staff will report back to Council on options to purchase and install charging equipment prior to delivery of the first bus.

New Flyer will hold the pricing for the second bus and charging equipment until May 1, 2020. This will allow the ICIP funding to be finalized that is required for the purchase of the second electric bus and charging equipment.

Each bus is expected to travel approximately 75,000 kilometres and operate 4,000 hours annually. The introduction of each electric bus is expected to reduce emissions by approximately 130 tonnes of CO₂e annually. Over the expected 12-year useful life of each electric transit bus, greenhouse gas (GHG) emissions are expected to be reduced by approximately 1,560 tonnes of CO₂e. The use of diesel fuel by Kingston Transit's buses

November 19, 2019

Page 5 of 6

represents over 30% of the municipality's annual carbon footprint. The transition to electric buses has the potential to significantly reduce the City's GHG emissions.

This purchase was identified as one of the initiatives to support Council's priority to Demonstrate Leadership on Climate Action.

The total capital cost for the implementation of these two long-range electric buses is estimated at \$2,713,876 including taxes. This includes the cost of the bus, a charger (including installation and commissioning), staff training, tooling, and public marketing/communication highlighting the benefits of Kingston's first electric buses. The single charger will be capable of charging both of the electric buses. The staff training will also be transferable to future electric bus purchases.

As previously communicated to Council, it will be critical to understand the electrical infrastructure needs and associated building upgrades that will be required to support additional electric buses purchases prior to acquiring any additional electric buses beyond the initial two. The electrical capacity feasibility study will be completed in 2020.

Existing Policy/By-law:

By-law Number 2000-134, "A By-law to Establish Purchasing Policies and Procedures for the City of Kingston", as amended.

Notice Provisions:

Not Applicable

Accessibility Considerations:

The electric bus will be compliant with all accessibility requirements in the *Accessibility for Ontarians Disability Act (AODA)* and associated regulations.

Financial Considerations:

There are sufficient capital funds for this purchase. The cost required to undertake a detailed electrical capacity study of the Kingston Transit facility has been included for Council consideration as part of the 2020 budget deliberations.

Significant operating cost budget savings are anticipated due to the current difference in cost between diesel fuel and electricity however the actual value of those savings cannot be quantified until battery charging and other EV bus operating costs are more completely understood by staff.

Contacts:

Jeremy DaCosta, Director, Transit Services 613-546-4291 extension 1310

Brent Fowler, Director of Corporate Asset Management & Fleet 613-546-4291 extension 3109

November 19, 2019

Page 6 of 6

Other City of Kingston Staff Consulted:

Desiree Kennedy, Chief Financial Officer & City Treasurer

Alan McLeod, Acting City Solicitor

Exhibits Attached:

Not applicable